CITY OF LODI

COUNCIL COMMUNICATION

AGENDA TITLE: Authorize the City Manager to approve removal of two (2) Eucalyptus trees and two (2) Maple trees at Lodi Lake

MEETING DATE: July 3, 2002

PREPARED BY: Parks and Recreation Director

RECOMMENDED ACTION: For City Council to authorize City Manager to approve the removal of two (2) Eucalyptus trees and two (2) Maple trees at Lodi Lake.

BACKGROUND INFORMATION: Staff recently completed a systematic process of assessing the potential for a tree or one of its parts to fail and injure people or damage property. The primary goal of the hazard evaluation was to identify "failure potential" so they can be eliminated. The second goal was to identify "hazard potential" given the location of the trees. Staff conducted an initial ground inspection of two Eucalyptus trees located at Lodi Lake. The examination included inspection of the root crown, trunk and scaffold branches. Binoculars were used to examine the upper scaffold branches. Based on findings from the ground inspection, it was necessary to have a Certified Arborist conduct an upper canopy examination to determine the extent of rot and decay observed from the ground. The arborist also performed a Root Crown Excavation to determine the extent of rot and decay at ground level. On April 5, 2002, Certified Arborist Russell Rumble conducted an Aerial Inspection and a Root Crown Examination. A copy of Mr. Rumbles Arborist Report is attached.

Based on the aerial inspection both Eucalyptus trees were found to have high failure potential. A large amount of rot and decay was observed in all main scaffolds in the upper canopy. These defects in the upper canopy are due to "topping". The new vigorous regrowth is of high concern due to its very weak attachment potential. Unfortunately, the practice of topping has altered the natural architecture of these Eucalyptus trees. The fact is additional pruning will not improve or correct the structural concerns of these trees. If given permission to remove the two Eucalyptus trees, staff plans to plant four new trees located within a newly designed tree island located in the same parking lot area.

Additionally, staff is asking for permission to remove two Maple trees that are located in the planter bed under the electrical utility lines along Turner Road. The two Maple trees have been severely pruned over the years in an effort to keep them a minimum of ten feet from the lines overhead. Not only has the pruning been destructive to the trees, it increases maintenance cost for the utilities division. By giving us permission to remove the two Maples trees, we can then be allowed to select two trees that can grow to maturity but stay under the utility lines (The Right Tree In The Right Place).

APPROVED: _____
H. Dixon Flynn -- City Manager

06/26/02

CITY OF LODI

COUNCIL COMMUNICATION

FUNDING: Electric Utility Department will financially support the removal of the two Maple trees at a cost of $700. The $3,000 cost to remove the two Eucalyptus trees will come from the Parks Division general maintenance account.

Funding Available: _____
Vicky McAthie, Finance Director

_____
Alan N. Vallow
Electric Utility Director

_____
Roger Baltz
Parks and Recreation Director

Prepared by Steve Dutra, Park Superintendent

cc: City Attorney
Electrical Utility Director

APPROVED: _____
H. Dixon Flynn -- City Manager

06/26/02

LODI LAKE PARK
TWO EUCALYPTUS TREES
IN SOUTHWEST PARKING LOT

PREPARED BY:
CITY OF LODI - PARKS SUPERINTENDENT
STEVE DUTRA, CERTIFIED ARBORIST WC-3311

MAY 29, 2002

Lodi Lake Park
Two Eucalyptus Trees In Southwest Parking Lot

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MEMO TO PARKS AND RECREATION DIRECTOR

MEMORANDUM, City of Lodi Parks and Recreation Department

To: Roger Baltz, Director of Parks and Recreation

From: Steve Dutra, Parks Superintendent

Date: May 20, 2002

Subject: Request for Tree Replacement

This memo is being forwarded to you in an effort to bring to your attention a high "hazard potential" with two Eucalyptus trees located in Lodi Lake parking lot just east of the beach house.

Staff recently completed a systematic process of assessing the potential for a tree or one of its parts to fail and injure people or damage property. The primary goal of the hazard evaluation was to identify "failure potential" so they can be eliminated. The second goal was to identify "hazard potential" given the location of the trees.

I conducted an initial ground inspection of both trees. My examination included inspection of the root crown, trunk and scaffold branches. Binoculars were used to examine the upper scaffold branches.

Based on findings from the ground inspection, I felt it necessary to have a Certified Arborist conduct an upper canopy exam to determine the extent of rot and decay observed from the ground. This arborist would also perform a Root Crown Excavation to determine the extent of rot and decay at ground level.

On April 5,2002 Certified Arborist Russell Rumble conducted an Aerial Inspection and a Root Crown Examination. I have provided you a copy of Mr. Rumbles Arborist Report.

Based on the aerial inspection both trees were found to have high failure potential. A large amount of rot and decay was observed in all main scaffolds in the upper canopy. These defects in the upper canopy are due to "topping" at approximately 40-45' over the years. The new vigorous regrowth is of high concern due to its very weak attachment potential (see photos). Unfortunately, the practice of topping has altered the natural architecture of these Eucalyptus trees. The fact is additional pruning will not improve or correct the structural concerns of these trees.

Due to the findings of my ground inspection and the aerial inspection performed by Grover Landscape Service, I strongly recommend that you consider reducing the

hazard potential of these Eucalyptus trees by giving the Parks Division permission to replace both existing trees.

Currently the Parks Division is developing construction drawings of the parking lot area where these trees are located. I have provided you a copy of the proposed plans. As you can see, the parking lot plans call for planting six new trees. Two of the six will be placed in the existing planter along Turner Road. Four new trees will be planted in a new tree island in the center of the parking lot project.

I want to stress I am not suggesting the removal of the existing Eucalyptus trees because of the potential benefit to the parking lot project. My recommendation is based on the safety concerns that presented themselves during the Certified Arborist examinations.

Arborist observations, findings and recommendations have been discussed with the Parks and Recreation Commission, Friends of Lodi Lake, Lodi Lake Docents and the Nature Area Advisory Committee. No member of these interest groups has objected with my recommendations. Some members have questioned me on future specie selections for the new parking lot layout. I have informed them that native materials would be preferred.

Additionally pertaining to the parking lot project, I have contacted our Electrical Utility Department asking them to support the removal of two Maple trees located in the planter bed under the power lines along Turner Road (see photos). EUD will support the removal, including payment to a contractor for removal. Both of these trees are full of dead wood, decay and rot due to years of wanting to keep the trees ten feet below the power lines.
By removing both Maple trees and replanting with a smaller tree variety, keeping well below the power lines without requiring pruning two or three times a year, EUD will spend less annually on line clearance pruning.

I do realize that the replacement of these trees is a big deal. I know staff has the betterment of the park users in mind.

I look forward to getting direction on this matter.

By initial please authorize:

Roger Baltz, Director of Parks and Recreation
Dixon Flynn, City Manager

GROVER LANDSCAPE SERVICES ARBORIST REPORT

GROVER
Landscape Services, Inc.

LODI LAKE - ARBORIST REPORT
2 EUCALYPTUS IN SOUTHWEST PARKING LOT

Prepared for:

City of Lodi
c/o: Steve Dutra
125 N. Stockton St
Lodi, California 95240

Prepared by:

Grover Landscape Services, Inc.
2825 Kiernan Ave
Modesto, California 95356
Russell Rumble
Certified Arborist #613

5/9/02

Corporate Office
2825 Kiernan Avenue
Modesto CA 95356-9749

Telephone 209 545-4401
Fax 209 545-3315
toll free 800 585-4401

Fresno Service Center
5392 North Barcus
Fresno CA 93722-5050

Telephone 559 277-9570
Fax 559 276 2396

Lodi Lake - Arborist Report
Eucalyptus in Southwest Parking Lot

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*Documentary Pictures Attached

Lodi Lake - Arborist Report
Eucalyptus in Southwest Parking Lot

Executive Summary:

City of Lodi anticipates reconstruction of parking lots by Conservation Center, east of Pool House. Two large Eucalyptus trees are growing in the middle of existing parking lot, with asphalt placed up to base of tree root flares.

The root system of these trees have buckled and lifted the surrounding asphalt, with cracks radiating up to 30' from base of trees. Both trees were topped several times over the years.

Grover was asked to perform an Aerial Inspection of both of the tree canopies and assess tree health to determine potential impact of construction of new parking lot.

Based on our assessment of the trees, we are recommending removal of both trees due to enclosed findings. These findings are mainly: rot and decay in root crowns, and upper canopy from previous topping; and poorly attached limbs, which potentially endanger the public. Also, if a new parking lot is to be constructed the resulting root damage will negatively impact these trees, speeding up their demise and adding potential liability for tree failure.

If desired by the City, the east tree could be potentially salvaged if a 40-50' radius planter would be installed around the tree to prevent parking within the dripline of the tree, supplemental watering was applied, and the tree would have a Hazard Reduction Pruning performed on it every 2-3 years or more often, as directed by a Certified Arborist.

Lodi Lake - Arborist Report
Eucalyptus in Southwest Parking Lot

Survey Methods:

1. An Aerial Lift truck was used to access the upper canopy to a height of 65′ to determine extent of rot and decay in old pruning, topping cuts.

2. A Root Crown Excavation was performed to determine extent of rot and decay. A metal probe and mallet were used to determine trunk and root flare soundness. No trunk boring or Resistograph testing was performed to determine sound or rotten interior wood.

Description of Trees:

Tree #1 (West Tree) - Eucalyptus viminalis, diameter at breast height 54"
- Topped to approximately 40-45′ height over the years with vigorous regrowth.
- Rot and decay prevalent in all main scaffolds in upper canopy.
- Weakened branch attachments
- Conks, fungus, root rot in 4 areas at base of tree, and several root flares were rotten.
- Main trunk and main scaffolds are sound and solid.
- Major root flares are disrupting asphalt for up to 30′ distance.
- Ant colony on south side of the base of tree, further indication of interior heart rot.

Condition Rating: Poor

Tree #2 (East Tree) - Eucalyptus viminalis, diameter at breast height 53"
- Topped to approximately 40-45′ height with resulting rot and decay and vigorous regrowth, with poor branch attachments.
- Termites and other insects in rotting limbs in upper canopy.
- Extensive root system uplifting and damaging the asphalt and hindering the parking up to 8′ from base of tree. Roots cracking asphalt up to 30′ away.
- Root Crown, trunk and main scaffolds seem sound and solid.

Condition Rating: Fair

Lodi Lake - Arborist Report
Eucalyptus in Southwest Parking Lot

Suitability of Preservation:

Since the trees have had large heading (topping) cuts performed on them, there has been resulting rot and decay extenuating down into the secondary scaffolds, and in a few instances, the main stem. These large pruning wounds do not callus over and seal the interior portion of the tree, which is dead and very susceptible to insect and fungi infestation. These infestations work together to break down this deadwood, causing a loss of structural strength for new limbs which grow below the heading cuts.

After a tree is topped, latent or dormant buds along the sides of these branches, most within 1-2' below the pruning cut, are released to grow. They do grow very vigorously. These long, vigorous "watersprouts" grow quickly and within several years do not have strong branch attachments to the parent stem. Each annual growth ring is like layered cells encircling the branch in locking collars to attach the new branch to the parent limb. Since these vigorous watersprouts have fewer "locking collar" attachments, they are more prone to failure. This is especially true, and an increase in failure rate occurs, when there is rot and decay on the inside of these topping cuts.

Both of these trees have vigorous upright growth and have been trimmed and thinned at least once since topping, to try to reduce the limb failure rate. This is a continued maintenance problem, which needs to be assessed annually and potential work needs to be performed every 2-3 years, depending on water provisions, weather, tree growth and response to the same. Both trees need to have a Hazard Reduction Pruning performed on them at this time to prevent potential liability to the public.

Both trees have seriously raised, buckled and cracked the asphalt causing not only damage, but also trip hazards. To remove these trip hazards, the asphalt would need to be peeled back 8-10' or more if all cracks were repaired, many cracks extend up to 20-30' from base of tree. It is not advisable to perform any major root pruning within 12-15' on a tree of this magnitude, and not all four sides of the tree in the same year.

I do not believe that the trees will respond very well to extensive grade changes, root removal, compaction, or new asphalt poured down, which will prevent water percolation to sub-soil, where existing roots have searched for water and eked out an existence for years.

In my opinion these trees are non-native and do not add much value to the site aesthetically; they are messy in that they shed leaves and bark year around, and due to reasons stated above, pose a hazardous risk to the public.

Lodi Lake - Arborist Report
Eucalyptus in Southwest Parking Lot

Evaluation of Potential Impacts:

If heavy root pruning, grade changes (either cut and fill), compaction or any combination of these occur to the trees, I am recommending removal. Large roots that are cut will also rot and decay (similar to topping cuts) causing a weakened tree both structurally (anchorage) and nutritionally.

Tree #1 (west tree) already has root and heart rot, and is declining. Both Armillaria (Oak Root Fungus) and Pleurotus ostreatus (Oyster Mushroom) have infested the tree, as well as an ant colony.

Any new construction will cause further stress, decline of the trees and increase public liability and maintenance costs. I recommend removal of both trees.

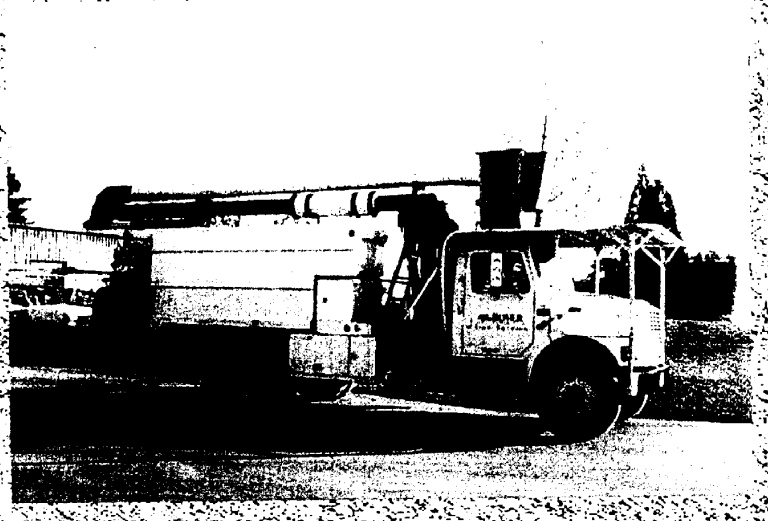
Possible Preservation of Tree #2 (East Tree):

Both trees have high limb failure potential, rot and decay in main scaffolds, extensive root systems, which have damaged the parking lot causing trip hazards and both have high maintenance costs with continual pick up of leaf and limb debris and future Hazard Reduction Pruning costs.

Having said this, it would be possible to save Tree #2 (the east tree) if a 50-60' planter was placed around the dripline of the trees canopy and if an irrigation system was installed to compensate for root loss during parking lot changes. Also the tree would need to be inspected annually by a Certified Arborist to determine potential hazards, and give further recommendations on future care, with possible Hazard Reduction Pruning performed every 2 years to prevent liability to the public. Hazard Reduction Pruning needs to be performed prior to parking lot renovation. No heavy equipment would be allowed within dripline area of the tree, but the tree would be fenced to protect this Root Zone Protection area; and no major roots would be cut or damaged, but the asphalt would be gently pulled back to create a new planter area.

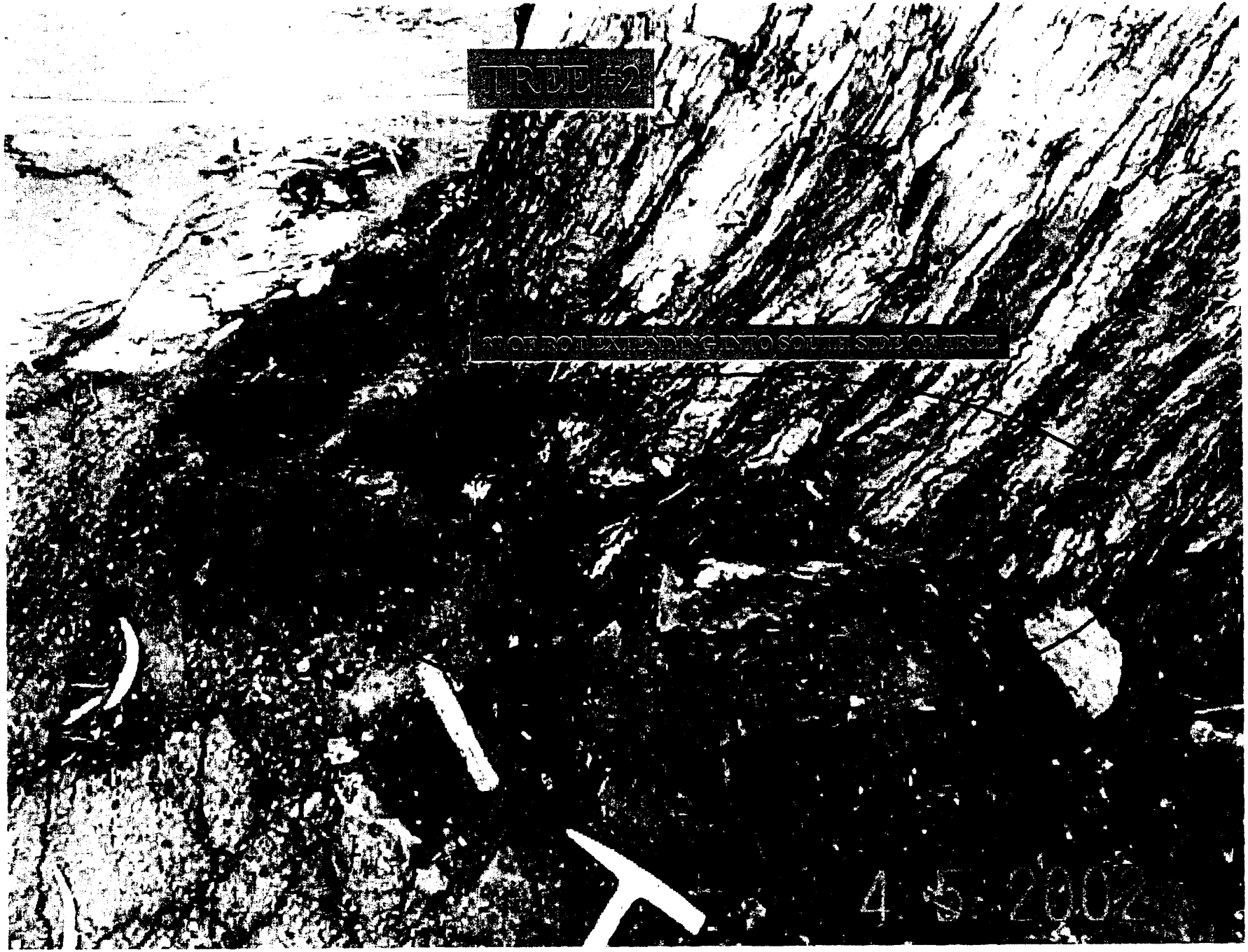
After the asphalt is removed a Root Crown Excavation may determine that there may be more rot and decay discovered in underground root flares, which insure that the tree should be removed.

GROVER LANDSCAPE SERVICES



TREE DIVISION


4. 5. 2002


TREE #2
4/5/2002


4. 5. 2002


4 5 2002

Tree #2
Eucalyptus
DBH 53"

GUIDE FOR JUDGING THE CONDITION OF LANDSCAPE TREES

FACTOR	VARIATION IN CONDITION FACTOR	POINTS	POINTS AWARDED
CROWN DEVELOPMENT	Characteristic of species-well balanced	(5)	
	Lacking natural or desired symmetry	(3)	
	Lacking full crown	(1)	1
TRUNK CONDITION	Sound and solid	(5)	
	Section of bark missing:		
	Less than 1/4 of circumference	(4)	
	1/4 to 1/2 missing	(3)	
	1/2 or more missing	(1)	4
	Extensive decay or hollow	(0)	
MAJOR BRANCH STRUCTURE	No defects	(5)	
	Die back limited	(4)	
	Few structurally important dead or broken branches	(3)	
	Several structurally important dead or broken branches	(1)	2
TWIG GROWTH RATE	Typical for species and age-usually 4-6 inches	(5)	
	Less than 1/2 normal growth rate	(3)	
	Growth rate greatly reduced-yearly decline	(1)	3
FOLIAGE	Normal size and color for species	(5)	
	Minor deficiency/pollution symptoms	(3)	
	Major deficiency/pollution symptoms	(1)	4
INSECTS & DISEASES	No insects or diseases apparent	(5)	
	Few controllable insects or diseases present	(3)	
	Severe infestation	(1)	3
ROOTS	No root problems apparent	(5)	
	Minor root problems	(3)	
	Severe root problems	(1)	3

Total Points	Condition Class	Formula % of Condition	
30-35	Excellent	90-100%	
24-29	Good	70-89	
17-23	Fair	50-69	20
11-16	Poor	25-49	
6-10	Very Poor	0-24	

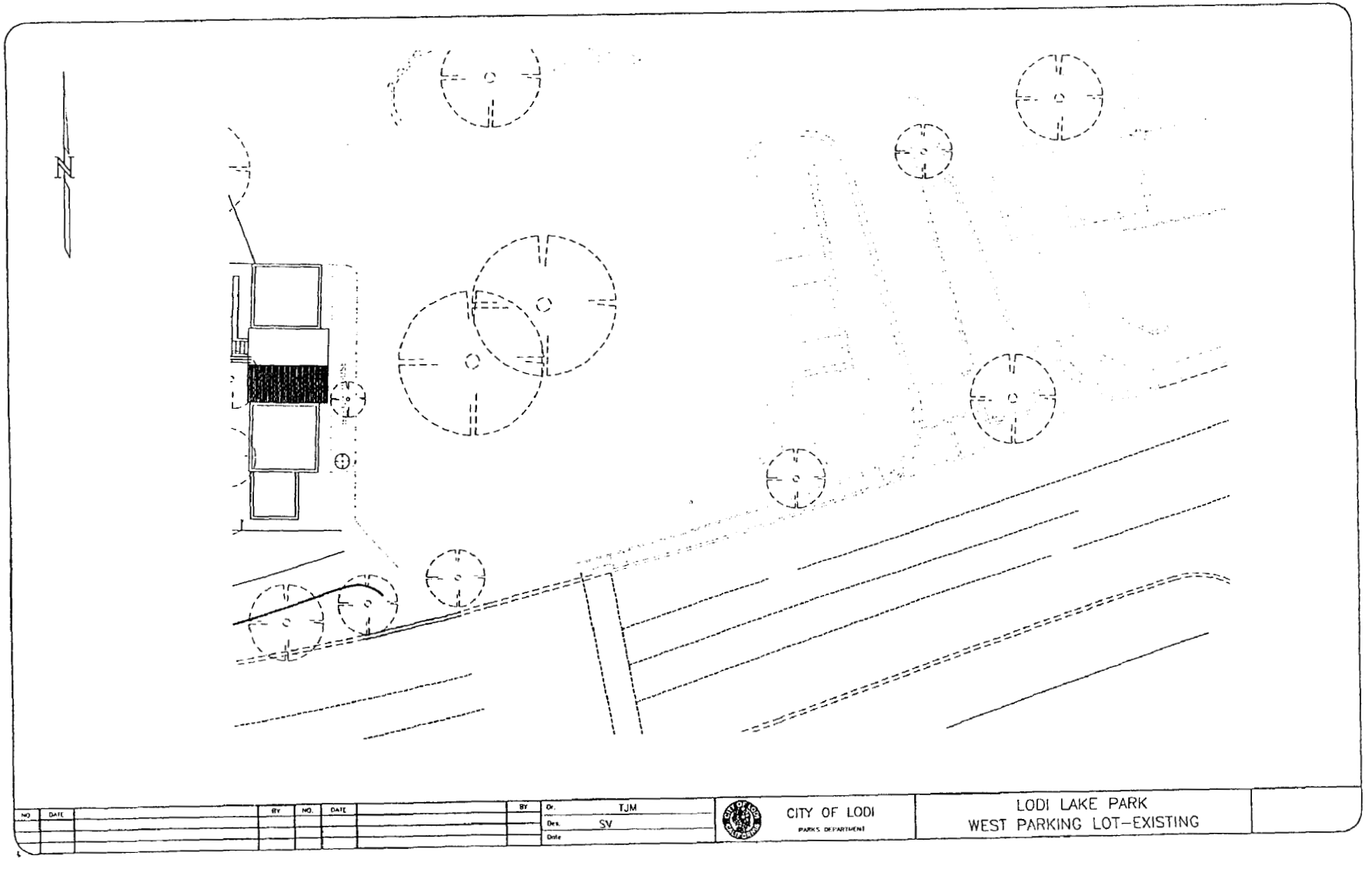
Tree #1
Eucalyptus
DBH 54"

GUIDE FOR JUDGING THE CONDITION OF LANDSCAPE TREES

FACTOR	VARIATION IN CONDITION FACTOR	POINTS	POINTS AWARDED
CROWN DEVELOPMENT	Characteristic of species-well balanced	(5)	
	Lacking natural or desired symmetry	(3)	
	Lacking full crown	(1)	1
TRUNK CONDITION	Sound and solid	(5)	
	Section of bark missing:		
	Less than 1/4 of circumference	(4)	
	1/4 to 1/2 missing	(3)	
	1/2 or more missing	(1)	
	Extensive decay or hollow	(0)	3
MAJOR BRANCH STRUCTURE	No defects	(5)	
	Die back limited	(4)	
	Few structurally important dead or broken branches	(3)	
	Several structurally important dead or broken branches	(1)	2
TWIG GROWTH RATE	Typical for species and age-usually 4-6 inches	(5)	
	Less than 1/2 normal growth rate	(3)	
	Growth rate greatly reduced-yearly decline	(1)	3
FOLIAGE	Normal size and color for species	(5)	
	Minor deficiency/pollution symptoms	(3)	
	Major deficiency/pollution symptoms	(1)	3
INSECTS & DISEASES	No insects or diseases apparent	(5)	
	Few controllable insects or diseases present	(3)	
	Severe infestation	(1)	3
ROOTS	No root problems apparent	(5)	
	Minor root problems	(3)	
	Severe root problems	(1)	1

Total Points	Condition Class	Formula % of Condition	
30-35	Excellent	90-100%	
24-29	Good	70-89	
17-23	Fair	50-69	16
11-16	Poor	25-49	
6-10	Very Poor	0-24	

EXISTING AND PROPOSED WEST PARKING LOT PLANS

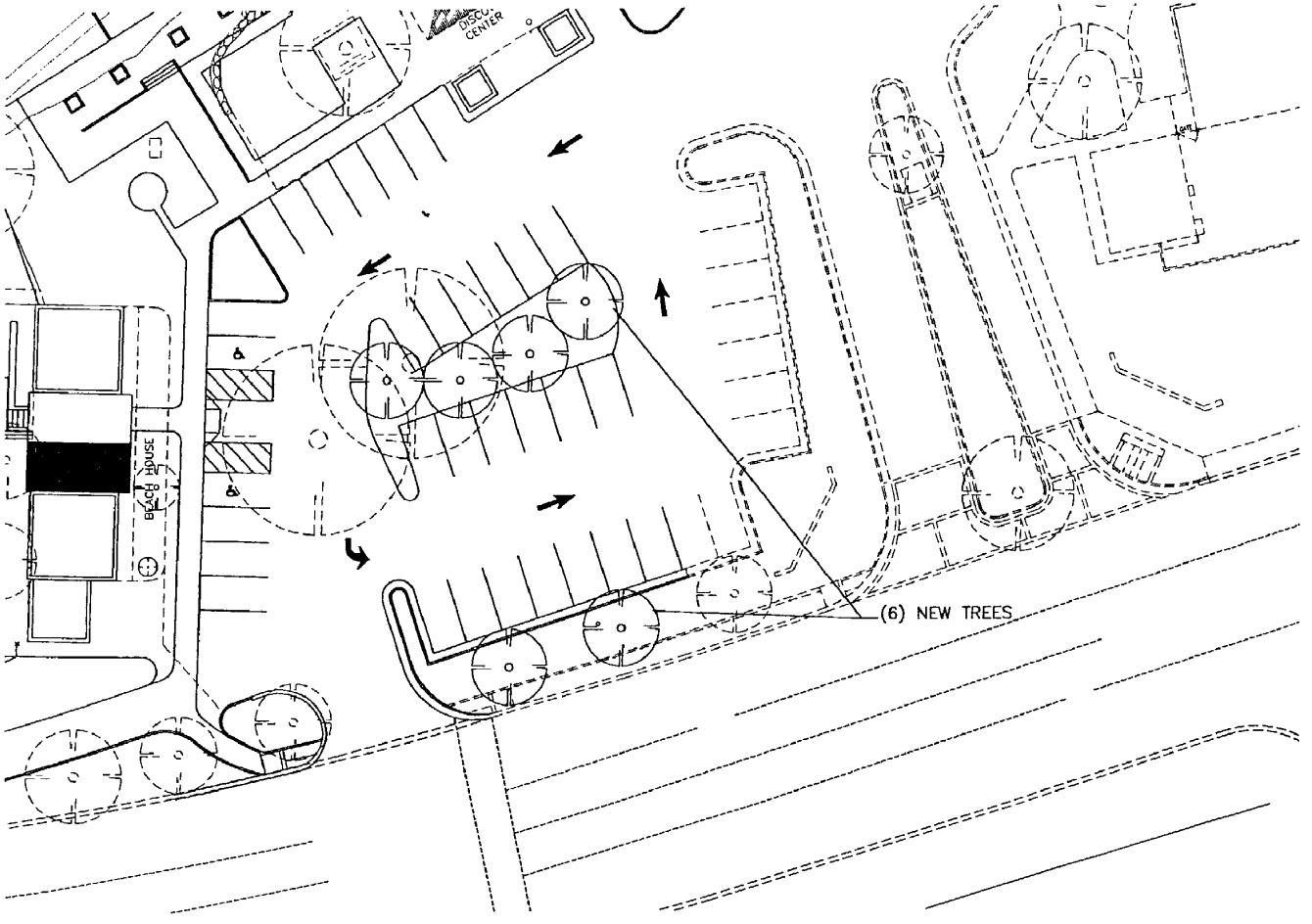


NO.	DATE		BY	NO.	DATE		BY

Dr. TJM
Des. SV
Date

CITY OF LODI
PARKS DEPARTMENT

LODI LAKE PARK
WEST PARKING LOT–EXISTING



NO.	DATE		BY	NO.	DATE		BY

Dr. TJM
Des. SV
Date

CITY OF LODI
PARKS DEPARTMENT

LODI LAKE PARK
WEST PARKING LOT–PROPOSED

PHOTOS OF EXISTING MAPLE TREES UNDER POWER LINES


MAY 16 2002
MAY 16 2002

RECEIVED
2002 JUL -1 PM 2:27
CITY CLERK
CITY OF LODI

6/26/02

Mr. Mayor and members of the Council — Please do us all a favor (Safety - City liability) and move forward with the removal of the eucalyptus trees and regrading and planting of replacement trees in the Lodi parking lot....

The late Dwight Dauber tried his best to remove these trees and his efforts fell on deaf ears.... timing apparently (no matter how dangerous) was not right.... It needs to be done, and done before someone is seriously injured OR damage is done to property.

Yours in Lodi and City
Paul Williamson
Suzie Williamson

P.S. Great job on the Skate Park

Two eucalyptus trees at Lodi Lake could be cut down due to disease

By Layla Bohm
NEWS-SENTINEL STAFF WRITER

Two large eucalyptus trees near the Lodi Lake beach area may soon be cut down, if the City Council agrees with a suggestion by the Parks and Recreation department.

According to a study done by a Modesto landscaping company, the trees are diseased and the tops are a hazard, due in part to improper pruning in the past, said Parks and Recreation Director Roger Baltz.

Branches from the trees frequently break off and fall to the parking lot below, and the roots have caused part of the pavement to buckle.

If the trees are removed, though, the parks and recreation department plans to replace them.

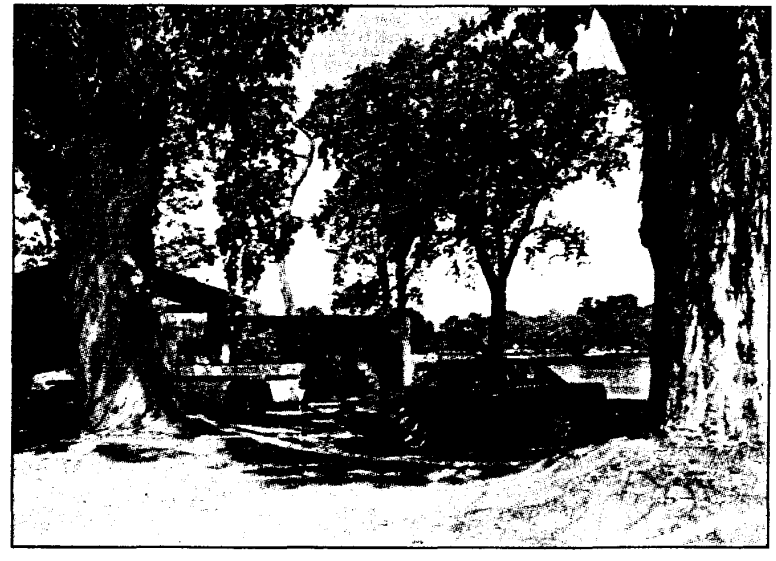
"Our hope and intent is to renovate that parking lot with a tree planter island and replace those trees with maybe four other trees," Baltz said.

He has requested to have the issue placed on the City Council agenda for next Wednesday's meeting, and the tree removal idea was met with initial approval by Vice Mayor Susan Hitchcock.

Although the Friends of the Lodi Lake seek to preserve the lake, co-founder Donna Phillips said she trusts the opinion of Parks Superintendent Steve Dutra, who commissioned the study and report.

"With the amount of research that Dutra did, it's obvious that he's not doing this lightly. It looks

Please see Trees, Page 10



Two giant eucalyptus trees in the southwest parking lot of Lodi Lake Park may soon be cut down. The trees are reportedly diseased and have the potential of becoming a safety hazard.

JERRY R. TYSON/
NEWS-SENTINEL

Trees

Continued from Page 1

like (the trees) need to come out," she said. "They're kind of a danger anyway, because of the debris that comes off them."

Councilwoman Emily Howard was also very concerned about safety and agreed that the trees should be removed. If they are a threat to personal property and the citizens of Lodi, she said, the trees must taken out.

But the suggestion is not without its opponents, some of whom believe there are alternative solutions.

"If they're maintained properly, it's not going to be a problem. I'd say that if it's bad news, let's trim them properly and then see what happens," said Lodi resident and tree advocate Don Womble.

Womble also suggested that, if the trees are a hazard, cars simply will not be allowed to park beneath them. Suggestions to replace the trees have been met with approval, but Womble said it wouldn't be the same.

"Let's face it; they're part of Lodi Lake. When I was a little guy, they were there at Lodi Lake, and I'm 76 years old," Womble said. "You don't destroy trees, replace them and have the same thing."

Howard was confident that the parks department would do a good job of replacing the trees.

"One nice thing the city of Lodi tends to do is replace trees," she said. "Our city's had a great history of replanting trees."

Womble, however, argued that it wasn't necessary to remove the trees.

"I've had eucalyptus trees on my property that died, and I just cut the dead part out and they came back," he said.

No time has been set for removal of the trees.